



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,259	08/20/2004	Seppo Vesterinen	059643.00481	3815
32294	7590	01/28/2009	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			AHMED, SALMAN	
8000 TOWERS CRESCENT DRIVE				
14TH FLOOR			ART UNIT	PAPER NUMBER
VIENNA, VA 22182-6212			2419	
			MAIL DATE	DELIVERY MODE
			01/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/505,259	VESTERINEN, SEPO	
	Examiner	Art Unit	
	SALMAN AHMED	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11/7/2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 and 14-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 and 14-38 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 8/20/2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claims 1-12 and 14-38 are pending.

Claims 1-12 and 14-38 are rejected.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12, 14-15 and 17-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharp (US6694471).

Regarding claim 1, Sharp discloses a system and method for periodic retransmission of messages (see col. 1 lines 30-47) comprising: • Wherein at least two of the entities (see figure 2 and figure 3 stream identifier) are configured to use stream control transmission protocol (see col. 1 lines 52-53) for signaling therebetween (see col. 3 lines 7-10 and figure 1), • Wherein the stream control transmission protocol signaling comprises a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of the entities (see col. 4 lines 26-35 and figures 1-3), and • Wherein the connection identity information (see col. 4 lines 29-40) identifies the ultimate destination of the data (see

col. 2 line 62 to col. 3 line 3 and col. 4 line 64- col. 5 line 2 and figure 1 where signaling message is communicated from a source to a destination).

Regarding claims 2 and 23, Sharp teaches the connection identity information comprises address information (see figure 2 col. 4 lines 26-35).

Regarding claims 3 and 24, Sharp teaches the address information identifies at least one other further entity (see figure 1 box 12 might by user terminal or server).

Regarding claims 4 and 25, Sharp teaches the connection identity information comprises information identifying an application (SCTP is like TCP connection oriented protocol, and maintain connection (relationship) during communication col. 3 lines 53-58 and col. 240-68).

Regarding claims 5 and 26, Sharp teaches the connection identity information identifies a connection flow (see col. 2 lines 40-68 and figures 1 and 2).

Regarding claims 6 and 27, Sharp teaches the connection identity information is provided in an stream control transmission protocol packet (see figure 2 and col. 2 lines 54-61 and col. 4 lines 26-35).

Regarding claims 7 and 28, Sharp teaches the connection identity information (see figure 2 and col. 2 lines 54-61 and col. 4 lines 26-35) is provided in the data chunk part of the stream control transmission protocol packet (see figure 2 and 3).

Regarding claims 8 and 29, Sharp teaches the connection identity information (see figure 2 and col. 2 lines 54-61 and col. 4 lines 26-35) is provided in a payload protocol identifier field (see figure 3 box 88).

Regarding claims 9 and 30, Sharp teaches the connection identity information (see figure 2 and col. 2 lines 54-61 and col. 4 lines 26-35) is provided in a field between a stream sequence number field and user data (see figure 3 item 84 and 86 stream identifier and stream sequence number respectively).

Regarding claims 10 and 31, Sharp teaches the connection identity information is provided in a header for the stream control transmission protocol packet (see figure 2 item 52 is header).

Regarding claims 11 and 32, Sharp teaches the address information is provided in a separate field in said stream control transmission protocol packet (see figure 2 source and destination port number).

Regarding claims 12 and 33, Sharp teaches the at least one of the two entities is arranged to provide further address information relating to at least one of the two entities (see figure 2 source entity and destination entity by their port number).

Regarding claim 34, Sharp teaches the at least one of said two entities comprises transmission unit configured to send and/or receive stream control transmission protocol packets to and/or from the other of said two entities (see figure 1 and 2 two different user terminal or server).

Regarding claims 14 and 35, Sharp teaches the at least one of said two entities comprises a set up unit configured to set up stream control transmission protocol associations (see col. 4 lines 27-35 and figure 2).

Regarding claims 15 and 36, Sharp teaches the at least one of said two entities comprises a receiving unit configured to receive status information relating to stream

control transmission protocol associations (see col. 4 line 63 to col. 5 line 5, sending acknowledgement to sender to confirm receiving status).

Regarding claims 17 and 37, Sharp teaches the at least one of said two entities comprises an adding unit configured to add the connection identity information of said further entity to a stream control transmission protocol packet (see figure 2 source and destination information).

Regarding claim 18, Sharp teaches the further entity comprises at least one of the following: user terminal, user, group of users, service, network, or part of network, server, or cell or base transceiver station (see user terminal in figure 1 item 12).

Regarding claim 19, Sharp teaches the one of said entities is one of the following: • base station; controller; radio network controller; core network; radio network access server; gateway or server (see figure 1 consider server 1 on LHS box 12) • and wherein the other of said entities is one of the following: • base station; controller; radio network controller; core network; radio network access server; gateway or server (see figure 1 consider server 2 on RHS box 12).

Regarding claim 20, Sharp teaches a method for use in an internet protocol based system comprising a plurality of entities (see col. 1 lines 30-47), the method comprising the steps of: • sending stream control transmission protocol transport signalling information between two of said entities (see figure 2 and figure 3 stream identifier and col. 3 lines 7-10), • wherein the stream control transmission protocol signalling information comprising a source port number, a destination port number, data, and connection identity information relating to a connection between said two entities

(see col. 4 lines 26-35 and figures 1-3), and • Wherein the connection identity information identifies (see col. 4 lines 29- 40) the ultimate destination of the data (see col. 2 line 62 to col. 3 line 3 and col. 4 line 64- col. 5 line 2 and figure 1 where signaling message is communicated from a source to a destination).

Regarding claim 21, Sharp teaches an entity for use in a internet protocol based system, the entity comprising • a transmission unit configured to send to another entity (see figure 2 and figure 3 stream identifier) an stream control transmission protocol (see col. 1 lines 52-53) transport packet (see col. 3 lines 7-10 and figure 1), • wherein the entity is configured to include in said packet a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of said entities (see col. 4 lines 26-35 and figures 1-3), and • Wherein the connection identity information identifies (see col. 4 lines 29- 40) the ultimate destination of the data (see col. 2 line 62 to col. 3 line 3 and col. 4 line 64- col. 5 line 2 and figure 1 where signaling message is communicated from a source to a destination).

Regarding claim 22, Sharp teaches an entity for use in a internet protocol based system, the entity comprising: • Means for sending to another entity (see figure 2 and figure 3 stream identifier) a stream control transmission protocol (see col. 1 lines 52-53) transport packet (see col. 3 lines 7-10 and figure 1), • Wherein the entity is configured to include in the packet a source port number, a destination port number, data, and connection identity information relating to a connection between the entity and the another entity (see col. 4 lines 26-35 and figures 1-3), and • Wherein the connection identity information (see col. 4 lines 29-40) identities the ultimate destination of the data

(see col. 2 line 62 to col. 3 line 3 and col. 4 line 64- col. 5 line 2 and figure 1 where signaling message is communicated from a source to a destination).

Regarding claim 38, Sharp discloses a system and method for periodic retransmission of messages (see col. 1 lines 30-47 and col. 3 line 6 software) comprising:

- Sending stream control transmission protocol transport signaling information from an entity to another entity (see col. 3 lines 21-56 and figure 2 and figure 3 stream identifier and col. 3 lines 7-10 and figure 1)
- Wherein the stream control transmission protocol signaling comprises a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of the entities (see col. 4 lines 26-35 and figures 1-3), and
- Wherein the connection identity information (see col. 4 lines 29-40) identifies the ultimate destination of the data (see col. 2 line 62 to col. 3 line 3 and col. 4 line 64- col. 5 line 2 and figure 1 where signaling message is communicated from a source to a destination).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp in view of Willars (US2001/005145).

Regarding claim 16, Sharp teaches most of limitations as applied to claim 1 above.

Sharp does not teach a forwarding unit configured to forward stream control transmission protocol packets to a radio network layer in dependence on said connection identity information.

Willars from the same or similar fields of endeavor teaches the use of forwarding SCTP packet to a radio network layer in dependence in the connection identity information of further entity (see figure 5a and 5b, item 88 SCTP is used for transporting the signaling over IP network and paragraph 90 ATM connection signaling initiator node initiates the application initiating procedure by sending an initiating application message to the other node. in response, the IP-based node returns an initiation response message, the initiation response message includes an address for the node and a SUGP value as a binding identification. The connection endpoint ID of node can be used as the SUGR in the q.all2 messages).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the SCTP for transporting the signaling over IP network from Willars in the system and method for periodic retransmission of messages of Sharp in order to preserve general architecture and principle of 3GPP UTRAN R99 and minimal impact on application layer protocol (see Willars item# 0147).

Response to Arguments

6. Applicant's arguments see pages 11-18 of the Remarks section, filed 11/7/2008, with respect to the rejections of the rejections have been fully considered and are not persuasive.

Applicant argues that (see page 13) Sharp fails to disclose that "said stream control transmission protocol signaling comprises a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of said entities, and wherein said connection identity information identifies the ultimate destination of said data", as recited, in part, in independent claim 1, and similarly in independent claims 20-22 and 38.

However, Examiner respectfully disagrees with the Application's assertion. Sharp does indeed teach the cited limitations. Specifically, Sharp teaches the stream control transmission protocol signaling comprises a source port number, a destination port number, data, and connection identity information (figure 3, stream identifier 84) relating to a connection between at least two of the entities (see col. 4 lines 26-35 and figures 1-3, FIG. 2 illustrates an exemplary SCTP packet 50 in which messages may be communicated between SCTP user applications 16. SCTP packet 50 includes a

common header 52 and one or more chunks 54. Common header 52 includes a source port number 56 and a destination port number 58 to allow multiplexing of different SCTP associations at the same IP address, a verification tag 60 to validate the source of packet 50, and a checksum 62 used for end-to-end error detection), and • wherein the connection identity information (see col. 4 lines 29-40, Each chunk 54 includes a chunk type field 64, a flag field 66, a chunk length field 68, and a chunk value 70. Each chunk 54 may include either user application data or SCTP control information. To further illustrate, Sharp teaches in column 5 lines 1-5, Data chunk 80 also includes a stream identifier 84 and a stream sequence number 86 that SCTP uses to assure sequenced delivery of user messages in a particular stream. A stream is a uni-directional logical channel established between two SCTP endpoints) identifies the ultimate destination of the data (see col. 2 line 62 to col. 3 line 3 and col. 4 line 64- col. 5 line 2 and figure 1 where signaling message is communicated from a source to a destination). To further illustrate, Sharp teaches in column 5 lines 1-5, Data chunk 80 also includes a stream identifier 84 and a stream sequence number 86 that SCTP uses to assure sequenced delivery of user messages in a particular stream. A stream is a uni-directional logical channel established between two SCTP endpoints. It is for the same reasons Examiner respectfully disagrees with the Applicant's assertion (see page 15) that Applicant disagrees that Sharp discloses the connection identity information as identifying the ultimate destination of the data

Applicant argues (see page 13) Sharp does not teach modifying any SCTP packets or any SCTP data/control chunks. In response to applicant's argument that the

references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., modifying any SCTP packets or any SCTP data/control chunks) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues (see page 15) that there is no indication that the final destination of the data is identified by connection identification information contained within the SCTP header. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., final destination of the data is identified by connection identification information contained within the SCTP header) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As such, Examiner respectfully disagrees with the Applicant's assertion (page 16) that Sharp fails to teach all of the subject matter of independent claims 1, 20-22 and 38.

Claim 16 is not allowable for the same reasons cited above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SALMAN AHMED whose telephone number is (571)272-8307. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A./

Examiner, Art Unit 2419

/Hassan Kizou/

Supervisory Patent Examiner, Art Unit 2419